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| | | | |
|---|------------------------|--|-------------------|
| UTILITY PATENT APPLICATION TRANSMITTAL <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i> | Attorney Docket No. | | MWS-111 |
| | First Inventor | | Joseph F. Hicklin |
| | Title | METHOD AND APPARATUS FOR IMPROVED MODELING OF CHEMICAL AND BIOCHEMICAL REACTIONS | |
| | Express Mail Label No. | | EL 982 740 456 US |

| | |
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| APPLICATION ELEMENTS <i>See MPEP chapter 600 concerning utility patent application contents.</i> | ADDRESS TO: MS Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 |
|--|---|

| | |
|--|--|
| 1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) <i>(Submit an original, and a duplicate for fee processing)</i> 2. <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. 3. <input checked="" type="checkbox"/> Specification [Total Pages 51] <i>(preferred arrangement set forth below)</i> - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure 4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets 10] 5. Oath or Declaration [Total Sheets 1] a. <input type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) <i>(for continuation/divisional with Box 18 completed)</i> i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application. see 37 CFR 1.63(d)(2) and 1.33(b). 6. <input checked="" type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 | 7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program <i>(Appendix)</i> 8. Nucleotide and/or Amino Acid Sequence Submission <i>(if applicable, all necessary)</i> a. <input type="checkbox"/> Computer Readable Form (CRF) b. Specification Sequence Listing on: i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or ii. <input type="checkbox"/> Paper c. <input type="checkbox"/> Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. <input type="checkbox"/> Assignment Papers (cover sheet & document(s)) 10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of Attorney <i>(when there is an assignee)</i> 11. <input type="checkbox"/> English Translation Document <i>(if applicable)</i> 12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations 13. <input type="checkbox"/> Preliminary Amendment 14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) <i>(Should be specifically itemized)</i> 15. <input type="checkbox"/> Certified Copy of Priority Document(s) <i>(if foreign priority is claimed)</i> 16. <input checked="" type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its 17. <input checked="" type="checkbox"/> Other: Appendix A (4 pages) |
|--|--|

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____

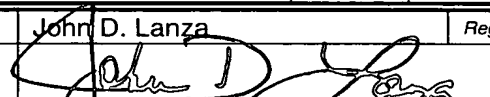
Prior application information: Examiner _____ Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

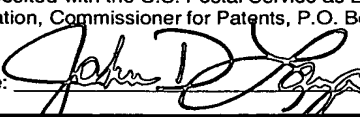
19. CORRESPONDENCE ADDRESS

☒ Customer Number: **00959** OR ☐ Correspondence address below

| | | | | |
|---------|---|-----------|----------------|--------------------|
| Name | LAHIVE & COCKFIELD, LLP Kevin J. Canning | | | |
| Address | 28 State Street | | | |
| City | Boston | State | MA | Zip Code 02109 |
| Country | US | Telephone | (617) 227-7400 | Fax (617) 742-4214 |

| | | | |
|-------------------|---|-----------------------------------|-------------------|
| Name (Print/Type) | John D. Lanza | Registration No. (Attorney/Agent) | 40,060 |
| Signature |  | Date | February 20, 2004 |

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EL 982 740 456 US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: February 20, 2004 Signature:  (John D. Lanza)

22782 U.S. PTO
10783552

022004



022004

PTO/SB/17 (10-03)

Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003, Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 1,316.00

Complete if Known

| | |
|----------------------|-----------------------|
| Application Number | Not Yet Assigned |
| Filing Date | Concurrently Herewith |
| First Named Inventor | Joseph F. Hicklin |
| Examiner Name | Not Yet Assigned |
| Art Unit | N/A |
| Attorney Docket No. | MWS-111 |

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number

12-0080

Deposit Account Name

Lahive & Cockfield, LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1001 | 770 | 2001 | 385 | Utility filing fee | 770.00 |
| 1002 | 340 | 2002 | 170 | Design filing fee | |
| 1003 | 530 | 2003 | 265 | Plant filing fee | |
| 1004 | 770 | 2004 | 385 | Reissue filing fee | |
| 1005 | 160 | 2005 | 80 | Provisional filing fee | |
| SUBTOTAL (1) | | | | | 770.00 |

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Total Claims | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|------------------|
| 36 | -20** = 16 | x 18.00 = | 288.00 |
| Independent Claims | 6 | -3** = 3 | x 86.00 = 258.00 |
| Multiple Dependent | | | |

| Large Entity | | Small Entity | | Fee Description |
|--------------|----------|--------------|----------|--|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | |
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 |
| 1201 | 86 | 2201 | 43 | Independent claims in excess of 3 |
| 1203 | 290 | 2203 | 145 | Multiple dependent claim, if not paid |
| 1204 | 86 | 2204 | 43 | ** Reissue independent claims over original patent |
| 1205 | 18 | 2205 | 9 | ** Reissue claims in excess of 20 and over original patent |

**or number previously paid, if greater. For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet. | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for ex parte reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 420 | 2252 | 210 | Extension for reply within second month | |
| 1253 | 950 | 2253 | 475 | Extension for reply within third month | |
| 1254 | 1,480 | 2254 | 740 | Extension for reply within fourth month | |
| 1255 | 2,010 | 2255 | 1,005 | Extension for reply within fifth month | |
| 1401 | 330 | 2401 | 165 | Notice of Appeal | |
| 1402 | 330 | 2402 | 165 | Filing a brief in support of an appeal | |
| 1403 | 290 | 2403 | 145 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | |
| 1453 | 1,330 | 2453 | 665 | Petition to revive - unintentional | |
| 1501 | 1,330 | 2501 | 665 | Utility issue fee (or reissue) | |
| 1502 | 480 | 2502 | 240 | Design issue fee | |
| 1503 | 640 | 2503 | 320 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 770 | 2809 | 385 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37CFR 1.129(b)) | |
| 1801 | 770 | 2801 | 385 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | |

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

Name (Print/Type) John D. Lanza

Registration No. (Attorney/Agent)

40,060

(Complete if applicable)

Telephone (617) 227-7400

Signature

Date

February 20, 2004

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Dated: February 20, 2004

Signature: John D. Lanza (John D. Lanza)

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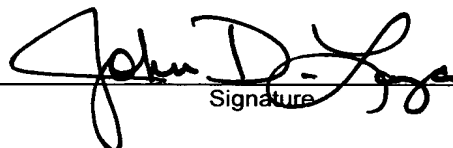
| | | |
|---|----------------------|--|
| NONPUBLICATION REQUEST UNDER 35 U.S.C. 122(b)(2)(B)(i) | First Named Inventor | Joseph F. Hicklin |
| | Title | METHOD AND APPARATUS FOR IMPROVED MODELING OF CHEMICAL AND BIOCHEMICAL REACTIONS |
| | Attorney Docket No. | MWS-111 |

I hereby certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

February 20, 2004
Date

(617) 227-7400
Telephone Number



John D. Lanza - 40,060
Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

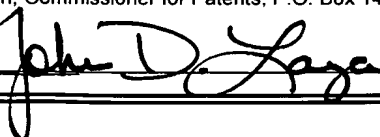
Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**

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Dated: February 20, 2004

Signature:



(John D. Lanza)

Application No. (if known):

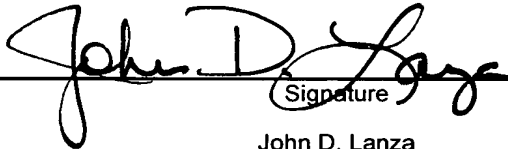
Attorney Docket No.: MWS-111

Certificate of Express Mailing Under 37 CFR 1.10

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MS Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on February 20, 2004
Date

A handwritten signature in black ink, appearing to read "John D. Lanza", is written over a horizontal line. The signature is fluid and cursive.

Signature

John D. Lanza

Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Application Data Sheet